

# Commonwealth of Massachusetts Executive Office of Energy & Environmental Affairs

# Department of Environmental Protection

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XXXXX XX, 2024

Ms. Mary Huth Crane Currency 30 South Street Dalton, MA 01226 RE: Dalton

ePlace Authorization #: AQ02F-XXXX Application #:23-AQ02F-0001-APP

Approval #: WE-23-001

FMF No.: 131946

AIR QUALITY PLAN APPROVAL

Dear Ms. Huth:

The Massachusetts Department of Environmental Protection ("MassDEP"), Bureau of Air and Waste, has reviewed your Non-major Comprehensive Plan Application ("Application") listed above. This Application concerns the proposed construction and operation of a dual fuel-fired boiler at your existing Crane & Company Inc. Pioneer Mill located at 60 Pioneer Street in Dalton, Massachusetts ("Facility"). The Application bears the seal and signature of William Stengle, Massachusetts Registered Professional Engineer Number 38432.

This Application was submitted in accordance with 310 CMR 7.02 Plan Approval and Emission Limitations as contained in 310 CMR 7.00 "Air Pollution Control" regulations adopted by MassDEP pursuant to the authority granted by Massachusetts General Laws, Chapter 111, Section 142 A-O, Chapter 21C, Section 4 and 6, and Chapter 21E, Section 6. MassDEP's review of your Application has been limited to air pollution control regulation compliance and does not relieve you of the obligation to comply with any other regulatory requirements.

MassDEP has determined that the Application is administratively and technically complete and that the Application is in conformance with the Air Pollution Control regulations and current air pollution control engineering practice, and hereby grants this **Plan Approval** for said Application, as submitted, subject to the conditions listed below.

Please review the entire Plan Approval, as it stipulates the conditions with which the Facility owner/operator ("Permittee") must comply in order for the Facility to be operated in compliance with this Plan Approval.

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On XXXXXXX, public notice was published on the MassDEP website for public review and comment on the proposed Non-Major Plan Approval (ePlace Application number: 23-AQ02F-0001-APP) for your Facility located at 60 Pioneer Street in Dalton, MA. The comment period ended XXXXX. No comments were submitted - OR - Comments were received. They are summarized in the attached Response to Comments.

# 1. DESCRIPTION OF FACILITY AND APPLICATION

#### A. FACILITY DESCRIPTION

The Facility is a paper manufacturer consisting of wood pulping and papermaking operations. The Facility has a 70.4 million British Thermal units per hour (MMBtu/hr) dual fuel-fired (#6 fuel oil and natural gas) Babcock & Wilcox Type FM boiler, known as Boiler 4, and a temporary 97.9 MMBtu/hr dual fuel-fired (ULSD and natural gas) boiler which provides process and space heating steam to the Pioneer, Wahconah, Old Berkshire and Bay State Mills.

Other air contaminant sources at the Facility include seven natural gas-fired emergency engines, an ultra low sulfur distillate fuel oil (ULSD)-fired emergency engine, eight natural gas-fired space heaters, a 9,000 gallon ULSD storage tank, a 217,000 gallon #6 fuel oil tank, a 20,000 gallon #6 fuel oil tank and nine chemical storage tanks. Boilers #2 (44MMBtu/hr #6 fuel oil and natural gas-fired) and #3 (44MMBtu/hr natural gas-fired) are no longer in service and were removed from the Facility in 2023.

The Facility currently has a Restricted Emission Status (RES) permit #1-R-94-100, issued March 10, 1995, which limits the Facility to no more than 99 tons per year of sulfur dioxide and no more than 49 tons per year of nitrogen oxides.

The Facility is an area source of hazardous air pollutants (HAPs) as defined in 40 CFR 63.2.

## **B. PROJECT DESCRIPTION**

The proposed plan approval is for the construction and operation of a new Superior Boiler Type DS, or equivalent, water tube package boiler identified as Emission Unit (EU) #32 herein. The new boiler will be located inside a boiler room building extension. The new boiler will replace the temporary 97.9 MMBtu/hr dual fuel-fired boiler which was constructed to provide steam previously supplied by the municipal waste combustors (MWCs) located at Community Eco Pittsfield, LLC in Pittsfield, MA. The MWCs are no longer in operation.

The proposed boiler will have a maximum heat input rate of 78.76 MMBtu/hr while firing natural gas and 75.18 MMBtu/hr while firing ULSD with a maximum sulfur content of 0.0015% by weight. The boiler will be equipped with Nano NOx, an ultra-low nitrogen oxides (NOx) Preferred Special Combustion burner system, and flue gas recirculation to minimize NOx emissions. The boiler will be capable of using natural gas as the primary fuel for 8,760 hours per year. If natural gas is not available, the boiler will be able to use ULSD.

A source which is part of the project but not subject to the plan approval requirements of 310 CMR 7.02 is a new 8,000-gallon aboveground double walled ULSD tank with spill containment.

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The storage tank is exempt from the plan approval requirements of 310 CMR 7.02 pursuant to 310 CMR 7.02(2)(b)11.

The boiler's potential to emit, using each fuel's maximum heat input rate, is shown in the table below.

Table 1: Emission Unit #32 Potential to Emit

Pollutant	Natural Gas <sup>1</sup> (TPY <sup>3</sup> )	ULSD <sup>2</sup> (TPY <sup>3</sup> )
NOx	3.79	32.93
CO	12.07	11.53
VOC	12.07	11.53
PM	0.69	4.94
$PM_{10}$	0.69	4.05
PM <sub>2.5</sub>	0.69	3.39
$SO_2$	0.2	0.52
Total HAPs	0.63	0.15

<sup>&</sup>lt;sup>1</sup> The emissions from the boiler using only natural gas at the maximum heat input capacity of 78.76 MMBtu/hr operating 8760 hours per year.

## C. REGULATORY REQUIREMENTS

#### 1. State Requirements

## MassDEP Plan Approval Regulations – 310 CMR 7.02

Since the proposed project plans to construct and operate a fuel utilization emission unit (boiler) with a heat input rating equal to or greater than 40 MMBtu/hr utilizing natural gas and ULSD, the Permittee was required to file an application for a comprehensive plan approval pursuant to 310 CMR 7.02(5)(a)2.a. and b. The review of a Permittee's comprehensive plan approval application is regulated pursuant to 310 CMR 7.02(1)(b) and 310 CMR 7.02(5) and is limited to regulating emissions from stationary sources.

The worst-case carbon dioxide equivalent (CO<sub>2</sub>e) emissions from the project have been estimated by Permittee to be 55,073 tons per year when firing ULSD for 8760 hours per year. Since the potential to emit for greenhouse gases is  $\leq$  75,000 tons per year of CO<sub>2</sub>e, the plan approval requirements of 310 CMR 7.02 do not apply to greenhouse gas emissions pursuant to 310 CMR 7.02(1)(d).

Stationary sources which are subject to the plan approval requirements of 310 CMR 7.02 must demonstrate that they will attain and maintain the best available control technology (BACT) emission rates for all regulated air pollutants emitted pursuant to the requirements of 310 CMR

<sup>&</sup>lt;sup>2</sup> The emissions from the boiler, in the event natural gas is unavailable, using only ULSD at the maximum heat input capacity of 75.18 MMBtu/hr operating 8760 hours per year.

<sup>&</sup>lt;sup>3</sup>TPY = tons per 12 consecutive month period

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7.02(8)(a)2. Pursuant to 310 CMR 7.00, BACT means an emission limitation based on the maximum degree of reduction of any regulated air contaminant emitted from any regulated facility which MassDEP, on a case-by-case basis taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such facility. BACT may also include a design feature, equipment specification, work practice, operating standard or combination thereof.

# Best Available Control Technology (BACT) Analysis

The Superior Boiler Type DS, or equivalent, water tube package boiler will emit the following regulated air pollutants: NOx, carbon monoxide (CO), volatile organic compounds (VOCs), sulfur dioxide (SO<sub>2</sub>), particulate matter (PM), particulate matter with an aerodynamic diameter of less than or equal to 10 microns (PM<sub>10</sub>), fine particulate matter with a mean diameter of less than or equal to 2.5 microns (PM<sub>2.5</sub>), and HAPs. Each of these pollutants have been evaluated for compliance with the applicable requirements of BACT pursuant to 310 CMR 7.02(8)(a)2. The results of the Permittee's BACT analysis, which MassDEP has approved, are discussed in the following paragraphs.

# NOx, CO, VOC and PM BACT

Pursuant to 310 CMR 7.02(8)(a)2.a., the Permittee has proposed that the NOx, CO, VOC and PM emissions from the boiler during the firing of natural gas and ULSD will be consistent with the MassDEP Top Case BACT Guidelines for boilers, dated June 2011.

PM, also called total PM, consists of all filterable and condensable PM, including the two subcategories of PM which are PM<sub>10</sub> and PM<sub>2.5</sub>. The PM<sub>10</sub> and PM<sub>2.5</sub> designations are based on the diameter of the particles with the 10 and 2.5 indicating the maximum diameter of the particle, in microns. Because PM<sub>2.5</sub> also has a diameter less than 10 microns, all PM<sub>2.5</sub> is PM<sub>10</sub>. BACT for PM<sub>10</sub> and PM<sub>2.5</sub> will be addressed separately since MassDEP's Top Case BACT Guidelines for boilers does not contain specific emission rates for PM<sub>10</sub> and PM<sub>2.5</sub>.

For natural gas, the following NOx, CO, PM and VOC emission rate limitations contained in Table 2 of Section 1.C.1. herein have been proposed by the Permittee as BACT. The NOx, CO, PM and VOC emission rate limits, in units of pounds per million British thermal units of heat input (lb/MMBtu), are consistent with MassDEP's Top Case BACT.

Table 2: BACT Emission Rates for NOx, CO, PM and VOC from Natural Gas

Pollutant	lb/MMBtu	lb/hr
NOx	0.011	0.87
CO	0.035	2.76
PM	0.002	0.16
VOC	0.035	2.76

lb/MMBtu = pounds per million British thermal units of heat input lb/hr = pound per hour

Each of the proposed emission rate limits shown in Table 2 of Section 1.C.1. herein were based on emission data from the manufacturer and a maximum heat input rate of 78.76 MMBtu/hr. No

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annual emission rate limitations are necessary since the Permittee has requested to be able to use natural gas at maximum capacity for 8760 hours per year.

For ULSD, the following NOx, CO, PM and VOC emission rate limitations contained in Table 3 of Section 1.C.1. herein have been proposed by the Permittee as BACT. The NOx, CO, PM and VOC emission rate limits, in units of lb/MMBtu, are consistent with MassDEP's Top Case BACT. No annual emission rate limitations are necessary since the Permittee has requested to be able to use ULSD at maximum capacity for 8760 hours per year. However, the Permittee intends to meet the definition of a gas-fired boiler, as defined in 40 CFR 63.11237, which only uses ULSD during periods of gas curtailment, gas supply interruption, startups, or for periodic testing, maintenance, or operator training on liquid fuel shall not exceed a combined total of 48 hours during any calendar year.

Table 3: BACT Emission Rates for NOx, CO, PM and VOC from ULSD

Pollutant	lb/MMBtu	lb/hr
NOx	0.100	7.52
CO	0.035	2.63
PM	0.015	1.13
VOC	0.035	2.63

Each of the proposed emission rate limits shown in Table 3 of Section 1.C.1. herein were based on emission data from the manufacturer and a maximum heat input rate of 75.18 MMBtu/hr.

In addition, the boiler will be equipped with combustion controls consisting of an ultra low NOx burner and flue gas recirculation for the purposes of minimizing NOx emissions. These controls are consistent with MassDEP's Top Case BACT.

MassDEP agrees that the proposed emission rate limits for NOx, CO, PM and VOC while firing natural gas and ULSD as well as the use of an ultra low NOx burner and flue gas recirculation satisfy the requirements of BACT.

# PM<sub>10</sub> and PM<sub>2.5</sub> BACT

The PM emissions from the combustion of natural gas in the boiler result from noncombustible trace constituents in the fuel. Increased PM emissions may result from poor air/fuel mixing or maintenance problems. Much of the PM emitted from natural gas combustion, which consists of small airborne solid or liquid particles, is estimated to be less than 1 micrometer in size and has filterable and condensable fractions. Therefore, the total PM emission rates from firing natural gas are equivalent to both PM<sub>10</sub> and PM<sub>2.5</sub>. Based on the manufacturer's total PM emission rate guarantee of 0.002 lb/MMBtu, an emission rate limitation of no greater than 0.002 lb/MMBtu and 0.16 lb/hr has been proposed as BACT for PM<sub>10</sub> and PM<sub>2.5</sub> when using natural gas.

The  $PM_{10}$  and  $PM_{2.5}$  emissions from the combustion of ULSD are dependent upon particles resulting from incomplete combustion and the ash content of the fuel. Since no manufacturer emission data was available for  $PM_{10}$  and  $PM_{2.5}$  when using ULSD, the Permittee has determined the proposed BACT  $PM_{10}$  and  $PM_{2.5}$  emission rates using emission data from the USEPA's AP-

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42, Fifth Edition Compilation of Air Pollutant Emissions Factors, Volume 1, Chapter 1.3: External Fuel Oil Combustion Sources. Using AP-42 Table 1.3-2 for boilers less than 100 MMBtu/hr firing distillate oil, the condensable PM portion was determined to be 1.3 lb/1000 gallons or 0.0096 lb/MMBtu. The condensable PM emission rate of 0.0096 lb/MMBtu was assumed to be the same for PM10 and PM2.5 since all condensable PM is assumed to be less than 1.0 microns in diameter.

To determine the filterable PM10 and PM2.5 portion, the condensable PM emission rate of 0.0096 lb/MMBtu was subtracted from the total PM BACT emission rate of 0.015 lb/MMBtu which resulted in a filterable PM emission rate of 0.0054 lb/MMBtu. Using the filterable PM emission rate, the cumulative particle size distribution information for industrial boilers firing distillate oil contained in AP-42 Table 1.3-6 was applied. The Cumulative Mass % column in Table 1.3-6 lists that 50% of filterable PM is filterable PM10 and 12% of filterable PM is filterable PM2.5 emission rates were calculated to be 0.0027 lb/MMBtu (0.5 x 0.0054 lb/MMBtu) and 0.000675 lb/MMBtu (0.125 x 0.0054 lb/MMBtu) [The Permittee used 12.5%, instead of 12%, of filterable PM as filterable PM2.5 which is more conservative]. Combining the filterable and condensable portions of PM10 and PM2.5 resulted in a total PM10 emission rate limitation of no greater than 0.0123 lb/MMBtu and 0.92 lb/hr and a total PM2.5 emission rate limitations, which include filterable and condensable matter, have been proposed as BACT when using ULSD.

No annual PM<sub>10</sub> and PM<sub>2.5</sub> emission rate limitations are necessary for natural gas or ULSD since the Facility has requested to be able to use either fuel at maximum capacity for 8760 hours per year.

In addition, the Permittee has proposed to optimize combustion by using an oxygen trim system with the boiler. As defined in 40 CFR 63.11237, an oxygen trim system means a system of monitors that are used to maintain excess air at the desired level in a combustion device over its operating load range. A typical system consists of a flue gas oxygen and/or CO monitor that automatically provides a feedback signal to the combustion air controller or draft controller. By optimizing the boiler's combustion and using low-sulfur and low-ash fuels, the PM emissions will be minimized in accordance with BACT.

Additional add-on particulate matter control devices were determined to not be justified based on the worst case PM<sub>10</sub> and PM<sub>2.5</sub> emission rates of 4.05 tons per year and 3.4 tons per year, as shown in Table 1 of Section 1.B. herein.

MassDEP agrees that the proposed emission rate limits for PM<sub>10</sub> and PM<sub>2.5</sub> while firing natural gas and ULSD as well as the use of an oxygen trim system satisfy the requirements of BACT.

# **Opacity**

In addition to the PM, PM<sub>10</sub> and PM<sub>2.5</sub> emission rate limitations, the Permittee has proposed an opacity limitation of not to exceed 10% at any time. This determination was based on the boiler's use of combustion optimization as well as low-sulfur and low-ash containing fuels which minimize visible emissions. This opacity limitation was also established as BACT for an

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approximately 40 MMBtu/hr natural gas and ULSD-fired boiler located at the University of Massachusetts-Amherst (Plan Approval #WE-20-001 issued May 7, 2020). Smoke emissions will be limited pursuant to 310 CMR 7.06(1)(a) and monitored/recorded pursuant to 310 CMR 7.04(2)(a).

#### **HAPs BACT**

HAPs are a group of 188 pollutants as designated by the Clean Air Act. HAP emissions from the combustion of natural gas and ULSD consist of trace metals contained within the fuel and organic compounds which are the product of incomplete combustion.

Since no manufacturer emission data was available for HAPs, the Permittee has determined the proposed BACT HAP emission rates using emission data from the USEPA's AP-42, Fifth Edition Compilation of Air Pollutant Emissions Factors, Volume 1, Chapter 1.4, Table 1.4-3 and Table 1.4-4 for Natural Gas Combustion and Chapter 1.3, Table 1.3-9 and Table 1.3-10 for Fuel Oil Combustion. Based on this information, the total HAP emission rates of 0.0018 lb/MMBtu and 0.14 lb/hr when firing natural gas and 0.0005 lb/MMBtu and 0.035 lb/hr when firing ULSD have been proposed as BACT.

No annual total HAP emission rate limitations are necessary for natural gas or ULSD since the Permittee has requested to be able to use either fuel at maximum capacity for 8760 hours per year.

The Permittee has proposed to ensure complete combustion as part of BACT for HAPs by using an oxygen trim system as previously discussed in the PM<sub>10</sub> and PM<sub>2.5</sub> BACT section. By optimizing the boiler's combustion of fuels, the organic HAP emissions will be minimized in accordance with BACT.

The trace metal HAPs in the fuel can be minimized by add-on particulate matter control devices; however, these were found to not be justified based on the worst-case total HAP emission rate of 0.63 tons per year, as shown in Table 1 of Section 1.B. herein.

MassDEP agrees that the proposed emission rate limits for HAPs while firing natural gas and ULSD as well as the use of an oxygen trim system satisfy the requirements of BACT.

#### SO<sub>2</sub> BACT

Emissions of SO<sub>2</sub> from the combustion of natural gas and ULSD result from the oxidation of sulfur compounds present in the fuel. Natural gas and ULSD inherently contain very low amounts of sulfur relative to other fossil fuels.

The Permittee has determined the proposed BACT SO<sub>2</sub> emission rates using emission data from A the USEPA's AP-42, Fifth Edition Compilation of Air Pollutant Emissions Factors, Volume 1, Chapter 1.4, Table 1.4-2 for Natural Gas Combustion and Chapter 1.3, Table 1.3-1 for Fuel Oil Combustion. Based on this information, the SO<sub>2</sub> emission rates of 0.0006 lb/MMBtu and 0.05 lb/hr when firing natural gas and 0.0016 lb/MMBtu and 0.12 lb/hr when firing ULSD have been proposed as BACT.

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No annual SO<sub>2</sub> emission rate limitations are necessary for natural gas or ULSD since the Permittee has requested to be able to use either fuel at maximum capacity for 8760 hours per year.

Additional add-on SO<sub>2</sub> control devices were found to not be justified based on the worst case SO<sub>2</sub> emission rate of 0.52 tons per year, as shown in Table 1 of Section 1.B. herein. The only control technique available is the use of low-sulfur containing fuels. Therefore, the Permittee has proposed that the boiler will only be fired on natural gas or ULSD with a maximum sulfur content of 0.0015% by weight as BACT.

MassDEP agrees that the proposed emission rate limits for SO<sub>2</sub> as well as restricting the allowable fuel types to only natural gas and ULSD (with a maximum sulfur content of 0.0015% by weight) satisfy the requirements of BACT.

# Other State Regulatory Requirements – 310 CMR 7.00

In addition to being subject to the BACT requirements of 310 CMR 7.02(8)(a)2., the project is subject to the visible emission requirements of 310 CMR 7.06, the dust, odor, construction and demolition requirements of 310 CMR 7.09 and the noise requirements of 310 CMR 7.10.

## Air Dispersion Modeling

This section documents the results from an air quality computer dispersion modeling analysis performed for the proposed boiler in combination with the existing dual fuel-fired Babcock & Wilcox Type FM boiler, known as Boiler 4, with a maximum heat input rate of 71.0 MMBtu/hr to demonstrate that the predicted air quality impacts associated with the construction and operation of the project will comply with applicable National Ambient Air Quality Standards (NAAQS). The air quality analysis was reviewed by MassDEP.

Note: The review revealed an error in the calculation of Boiler 4's PM10/PM2.5 emission rate. An erroneous emission factor was used in the calculation resulting in an emission rate (0.026 lb/hr) that was low by a factor of four. The corrected emission rate is 0.1058 lb/hr. As discussed below, this error did not change the compliance status of the modeling results.

## Type of Model

The air quality analysis was performed with version 22112 of the USEPA AERMOD model to determine the ambient air impacts of nitrogen dioxide (NO<sub>2</sub>), SO<sub>2</sub>, PM<sub>10</sub>, PM<sub>2.5</sub> and CO in the immediate vicinity and in the surrounding environs of the Facility. The normal operating condition for both boilers was modeled. This normal operating condition was defined as the proposed boiler firing natural gas and the existing Boiler 4 firing natural gas while operating at a 20% load. The proposed boiler was modeled alone at four load levels (25, 50, 75, and 100%) to determine the worst-case load and for comparison to Significant Impact Levels (SILs). The worst-case condition for the proposed boiler was determined to be the 100% load condition for the pollutants/averaging-periods in the cumulative portion of the modeling.

Included elements of the analysis are as follows:

• Regulatory default model options were used including the Tier 2 Ambient Ratio Method (ARM2) option with default inputs for conversion of NO to NO<sub>2</sub>.

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- AERMOD was set up to predict short-term and annual average concentrations of each pollutant (where appropriate) in units of ug/m<sup>3</sup>.
- BPIPPRM version 04274 was used to perform GEP stack height analysis and calculate building-specific downwash parameters for adjacent buildings and the stack. It was verified that the input files included the building-specific parameters.
- The area was classified as "rural" for modeling dispersion coefficients in the analysis. This is the appropriate classification for the Dalton area.

## **Meteorological Data**

Meteorological inputs consisted of five years (2017-2021) of sequential surface observations from the NWS ASOS station at Pittsfield Municipal Airport (PSF) and corresponding upper air observations from Albany, NY (ALB). This data was processed using AERMET version 22112 preprocessors with inputs provided by MassDEP. The PSF/ALB dataset was determined to be representative of the mill location in Dalton.

### **Selected Air Quality Monitors**

Air quality background concentration levels from the Springfield (NO<sub>2</sub>) and Pittsfield (PM<sub>2.5</sub>) monitors for the period 2020-2022 were utilized in the analysis. The background air quality "design values" added to the model-predicted concentrations were determined to be both representative of the area and conservative. The background design values were calculated and provided by MassDEP.

# **Receptor Network**

A Cartesian coordinate nested receptor grid was centered on the proposed boiler stack and extended 6 kilometers in all directions with spacing of 50-meters out to 0.5 km, 100-meters out to 2 km, 250-meter spacing to 4 km and 500-meter spacing to 6 km. Property line receptors (denoted in the report as ambient air boundary receptors) with 25-meter spacing were used. A total of 2530 receptors were employed. Terrain elevations for each receptor were obtained from the USGS National Map Seamless Server and processed using the AERMAP (version 18081) preprocessor.

#### **Air Dispersion Modeling Results**

Table 4 in POWER Engineer's modeling report presents the results of the significant impact area (SIA) analysis for the proposed boiler emissions. The modeling showed that maximum results for all pollutants/averaging-periods were under Significant Impact Levels (SILs) except for 1-hour & annual NO<sub>2</sub> and annual PM<sub>2.5</sub>. No further modeling was required for those pollutants/averaging-periods under the SILs. Because 1-hour & annual NO<sub>2</sub> and annual PM<sub>2.5</sub> showed limited results above the SILs, they were modeled cumulatively by including existing Boiler 4 and adding background concentrations to the modeled results. The worst-case impact for the proposed boiler was determined to be the 100% load case, so this condition was used in the cumulative modeling.

Table 6 in POWER Engineer's modeling report lists the cumulative modeling results. The results for all three pollutants/averaging-periods are fully compliant with the NAAQS. The total predicted impact concentrations represent the maximum model-predicted impact for the proposed boiler at 100% load running concurrent with Boiler 4 firing natural gas at 20% load plus background. A portion of the tables is reproduced below:

Pollutant	Averaging	Maximum	Ambient	<b>Total Modeled</b>	NAAQS	Percent
	Period	Modeled	Background	Impact (with	(ug/m3)	NAAQS
		Impact	(ug/m3)	Background) (ug/m3)		(%)
NO	1 1	(ug/m3)	77.0	, o ,	100	(2.6
$NO_2$	1-hr	41.7	77.8	119.5	188	63.6
$NO_2$	Annual	7.22	18.2	25.4	100	25.4
PM <sub>2.5</sub>	Annual	0.38	6.8	7.2	12	60.0
PM <sub>2.5</sub> -	Annual	1.52	6.8	8.3	12	69.2
adjusted						

An adjusted annual PM<sub>2.5</sub> modeling result is added to the table by MassDEP to account for the emission rate calculation error noted above. The combined model-predicted maximum PM2.5 concentration of 0.38 ug/m3 was scaled up by a factor of 4 to account for the emission factor error. This results in an adjusted model result of 1.52 ug/m3, which when added to the background value of 6.82 ug/m3 yields in an adjusted total impact of 8.3 ug/m3. The adjusted total impact concentration increases but remains in compliance with the NAAQS by a wide margin.

#### **Conclusion**

The air contaminant emissions from the proposed boiler together with the existing Boiler 4 firing natural gas at 20% load will neither cause nor contribute to a condition of air pollution with respect to the criteria pollutant emissions as shown by the modeling analysis MassDEP reviewed and described herein.

# 2. Federal Requirements

#### New Source Performance Standards (NSPS)

The Permittee has indicated that the proposed boiler is subject to 40 CFR 60 Subpart Dc—Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units because construction will commence after June 9, 1989 and it will have a maximum design heat input capacity of 100 MMBtu/hr or less, but greater than or equal to 10 MMBtu/hr. Since MassDEP has not accepted delegation for Subpart Dc for sources which are not subject to 310 CMR Appendix C, the Permittee is advised to consult with EPA Region 1 at 5 Post Office Square, Suite 100, Boston, MA 02109-3912, telephone: (617)918-1111. Other applicable requirements may include notification, recordkeeping, and reporting requirements.

Although MassDEP does not have delegation for Subpart Dc, the applicable requirements were evaluated to ensure the proposed boiler will be capable of complying with Subpart Dc. The applicable requirements of 40 CFR Part 60 Subpart Dc, including any testing, monitoring, recordkeeping and reporting, are described in the following paragraphs.

40 CFR 60.42c(d) specifies that the boiler must comply with an SO<sub>2</sub> emission limit of 0.50 lb/MMBtu or shall combust only fuel oil with a sulfur content of 0.5% by weight. The boiler will be more than capable of complying with either requirement since the proposed SO<sub>2</sub> emission rate limit and ULSD sulfur content limit are more stringent than the requirements of 60.42c(d).

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Compliance with the SO<sub>2</sub> emission limit or fuel oil sulfur content limit may be determined as specified in 60.44c(g) by sampling and analyzing the fuel oil, or by providing certification from the fuel supplier as specified in 60.42c(h) and 60.44c(h) and further described in 60.48c(f). As specified in 40 CFR 60.46c(e), the SO<sub>2</sub> monitoring requirements of 60.46c(a) and (d) will not apply if the Permittee demonstrates compliance with the SO<sub>2</sub> standards based on fuel supplier certification as described in 60.48c(f).

40 CFR 60.43c(c) specifies that the boiler must comply with an opacity standard of no greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity. As described in 60.43c(e)(4), the particulate matter standard in 60.43c(e)(1) will not apply to boilers which combust only natural gas or oil containing no more than 0.5 % by weight sulfur. The boiler will be more than capable of complying with the opacity standard and fuel oil sulfur content specified above since the opacity will be limited to less than 10% at any time and the sulfur content of the fuel oil will not exceed 0.0015% by weight.

40 CFR 60.45c(a)(8) requires the Permittee to conduct an initial performance test for opacity while firing ULSD in the boiler and must conduct subsequent performance tests pursuant to 60.47c(a)(1),(2) or (3). 60.45c(d) also requires facilities subject to 60.43c(e)(4) to follow the applicable procedures in 60.48c(f) regarding fuel supplier certification. For purposes of opacity monitoring, 60.47c(f)(3) requires the Permittee to operate according to a written site-specific monitoring plan which includes procedures and criteria for establishing and monitoring specific parameters indicative of compliance with the opacity standard.

The recordkeeping requirements are found in 40 CFR 60.48c(c)(1) through (3) as applicable, 60.48c(e)(1) through (11) as applicable, 60.48c(f)(1) and 60.48c(g)(1) through (3) as applicable.

The applicable reporting requirements for the initial construction and startup notification, test report submittals and semi-annual reports are found in 40 CFR 60.48c(a), (b), (c), (d), (e) and (j).

## National Emission Standards for Hazardous Air Pollutants (NESHAPs)

As defined in 40 CFR 63.2, the Facility is an area source of HAPs. As such, the Permittee has indicated that the proposed boiler is not subject to 40 CFR 63 Subpart JJJJJ –National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources since the boiler will meet the exemption criteria for a gas-fired boiler in accordance with 40 CFR 63.11195(e). 40 CFR 63.11237 defines a gas-fired boiler as any boiler that burns gaseous fuels not combined with any solid fuels and burns liquid fuel only during period of gas curtailment, gas supply interruption, startups, or for periodic testing, maintenance, or operator training on liquid fuel. Period testing, maintenance, or operator training on liquid fuel shall not exceed a combined total of 48 hours during any calendar year.

Since MassDEP has not accepted delegation for 40 CFR Part 63 Subpart JJJJJJ for sources which are not subject to 310 CMR 7.00: Appendix C, the Permittee is advised to consult with EPA Region 1 at 5 Post Office Square, Suite 100, Boston, MA 02109-3912, telephone:

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(617)918-1111. Other applicable requirements may include notification, recordkeeping, and reporting requirements.

# **2. EMISSION UNIT IDENTIFICATION**

Each Emission Unit ("EU") identified in Table 1 is subject to and regulated by this Plan Approval:

	Table 1				
EU	Description	Design Capacity	<b>Pollution Control Device</b>		
32	Dual Fuel-Fired Superior Boiler Type DS water tube package boiler, or equivalent as determined by MassDEP	<ul> <li>Maximum heat input rate of 78.76 MMBtu/hr – Natural Gas</li> <li>Maximum heat input rate of 75.18 MMBtu/hr - ULSD</li> </ul>	Ultra-low NOx Burner and Flue Gas Recirculation		

## Table 1 Key:

EU = Emission Unit	ULSD = ultra low sulfur distillate fuel oil
MMBtu/hr = millions of British thermal units per hour	
NOx = nitrogen oxides	

# 3. APPLICABLE REQUIREMENTS

# A. OPERATIONAL, PRODUCTION and EMISSION LIMITS

The Permittee is subject to, and shall not exceed the Operational, Production, and Emission Limits as contained in Table 2:

	Table 2				
EII	EU Operational / Production Limit	Air Contaminant	Fuel	uel Emission Limit	
EU	Operational / Froduction Limit			lb/MMBtu	lb/hr
32	1. Pursuant to the best available control technology provision of 310 CMR 7.02(8)(a)2., only natural gas or	NOx	Natural Gas	0.011	0.87
	ULSD shall be used as fuel for EU 32.		ULSD	0.10	7.52
	2. Pursuant to the best available control technology provision of 310 CMR 7.02(8)(a)2., the sulfur content	CO	Natural Gas	0.035	2.76
	of the ULSD shall not exceed 0.0015% by weight.		ULSD	0.035	2.63
	3. Pursuant to the best available control technology provision of 310 CMR 7.02(8)(a)2., ULSD shall only be used in EU 32 during period of gas curtailment, gas	VOC	Natural Gas	0.035	2.76
	supply interruption, startups, or for periodic testing,		ULSD	0.035	2.63
	maintenance, or operator training on liquid fuel.  Period testing, maintenance, or operator training on liquid fuel shall not exceed a combined total of 48	PM	Natural Gas	0.002	0.16
	hours during any calendar year.		ULSD	0.015	1.13
		$PM_{10}$	Natural Gas	0.002	0.16
			ULSD	0.012	0.92
		PM <sub>2.5</sub>	Natural Gas	0.002	0.16
			ULSD	0.010	0.77
		$\mathrm{SO}_2$	Natural Gas	0.0006	0.05
			ULSD	0.0016	0.12
		HAPs (total)	Natural Gas	0.0018	0.14
			ULSD	0.0005	0.035

	Table 2				
EU	Operational / Production Limit	Air Contaminant	Fuel	Emission Limit	
32		Smoke	Natural Gas/ ULSD	< No. 1 of Chart <sup>1</sup> , except No. 1 to < No. 2 of Chart for < 6 minutes during any one hour	
		Opacity		<10 % at any time	

# Table 2 Key:

CO = carbon monoxide	$NO_x$ = nitrogen oxides
EU = Emission Unit	PM = total particulate matter
HAPs (total) = total hazardous air pollutants	$PM_{10}$ = particulate matter less than or equal to 10 microns in diameter
lb/hr = pounds per hour	$PM_{2.5}$ = particulate matter less than or equal to 2.5 microns in diameter
lb/MMBtu = pounds per million British thermal units	$SO_2$ = sulfur dioxide
<= less than	ULSD = ultra low sulfur distillate fuel oil
	VOC = volatile organic compounds
	% = percent

## **Table 2 Notes:**

1. Chart means the Ringelmann Scale for grading the density of smoke, as published by the United States Bureau of Mines and as referred to in the Bureau of Mines Information Circular No. 8333, or any smoke inspection guide approved by MassDEP.

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# B. <u>COMPLIANCE DEMONSTRATION</u>

The Permittee is subject to, and shall comply with, the monitoring, testing, recordkeeping, and reporting requirements as contained in Tables 3, 4 and 5:

		Table 3
EU		Monitoring and Testing Requirements
32	1.	EU 32 shall be equipped with instrumentation which shall be maintained and operated to accurately measure the quantity of each fuel combusted in EU 32 so that fuel usage can be monitored on a monthly and consecutive 12-month basis.
	2.	The Permittee shall conduct an initial performance test for opacity while firing ULSD and shall conduct subsequent performance tests as requested by the MassDEP.
	3.	As described in 40 CFR 60.45c(a)(8), the Permittee shall use Method 9 of appendix A-4 of 40 CFR Part 60 for determining the opacity of stack emissions while firing ULSD.
	4.	As described in 40 CFR 60.47c(a), the Permittee shall conduct a performance test using Method 9 of appendix A-4 of 40 CFR Part 60 and the procedures in 40 CFR 60.11 to demonstrate compliance with the applicable opacity limit while firing ULSD within 180 days after initial startup of EU 32. The observation period for Method 9 of appendix A-4 of 40 CFR Part 60 performance tests may be reduced from 3 hours to 60 minutes if all 6-minute averages are less than 10 percent and all individual 15-second observations are less than or equal to 20 percent during the initial 60 minutes of observation.
	5.	As described in 40 CFR 60.47c(a)(1), the Permittee shall conduct subsequent Method 9 of appendix A-4 of 40 CFR Part 60 performance tests using the procedures in paragraph (a) of 40 CFR 60.47c, while firing ULSD, according to the applicable schedule in 40 CFR 60.47c(a)(1)(i) through (a)(1)(iv), and as listed below, as determined by the most recent Method 9 of appendix A-4 of 40 CFR Part 60 performance test results.
		a. If no visible emissions are observed, a subsequent Method 9 of appendix A-4 of 40 CFR Part 60 performance test must be completed within 12 calendar months from the date that the most recent performance test was conducted or within 45 days of the next day that ULSD is combusted, whichever is later;
		b. If visible emissions are observed but the maximum 6-minute average opacity is less than or equal to 5 percent, a subsequent Method 9 of appendix A-4 of 40 CFR Part 60 performance test must be completed within 6 calendar months from the date that the most recent performance test was conducted or within 45 days of the next day that ULSD is combusted, whichever is later;
		c. If the maximum 6-minute average opacity is greater than 5 percent but less than or equal to 10 percent, a subsequent Method 9 of appendix A-4 of 40 CFR Part 60 performance test must be completed within 3 calendar months form the date that the most recent performance test was conducted or within 45 days of the next day that ULSD is combusted, whichever is later; or
		d. If the maximum 6-minute average opacity is greater than 10 percent, a subsequent Method 9 of appendix A-4 of 40 CFR Part 60 performance test must be completed within 45 calendar days from the date that the most recent performance test was conducted.

	Table 3
EU	Monitoring and Testing Requirements
32	6. As described in 40 CFR 60.47c(f)(3), the Permittee shall operate EU 32 according to a written site-specific monitoring plan approved by EPA as required.
	7. As described in 40 CFR 60.44c(g) and (h), the Permittee shall conduct an initial performance test to demonstrate compliance with the fuel oil sulfur limits herein. The initial performance test shall consist of sampling and analyzing the oil in the initial tank of oil to be fired in EU 32 or shall consist of certification from the fuel supplier.
	8. The Permittee shall monitor fuel oil purchases such that only fuel oil containing a sulfur content no greater than 0.0015 percent by weight is purchased for use in EU 32.
	9. The Permittee shall monitor the sulfur content of each new shipment of fuel oil received. Sulfur content of the fuel can be demonstrated through fuel analysis. The analysis of sulfur content of the fuel shall be in accordance with the applicable American Society for Testing Materials (ASTM) test methods or any other method approved by the MassDEP and USEPA. Fuel sulfur information may be provided by fuel suppliers.
	10. Pursuant to 310 CMR 7.04(4)(a), the Permittee shall inspect and maintain each boiler in accordance with the manufacturer's recommendations and test it for efficient operation at least once in each calendar year.
	11. Pursuant to 310 CMR 7.04(2)(a), EU 32 shall be equipped with a smoke density sensing instrument and recorder which are properly maintained in an accurate operating condition, operates continuously and is equipped with an audible alarm to signal the need for combustion equipment adjustment or repair when the smoke density is equal to or greater than No. 1 of the Chart <sup>1</sup> .
	12. Pursuant to 310 CMR 7.04(2)(a), the smoke density equipment shall be available for inspection at reasonable times by a representative of MassDEP.
	13. The Permittee shall monitor all operations to ensure sufficient information is available to comply with 310 CMR 7.12 Source Registration and 310 CMR 7.71 Greenhouse Gas Reporting.
	14.If and when MassDEP requires it, the Permittee shall conduct emission testing in accordance with USEPA Reference Test Methods and Regulation 310 CMR 7.13.
	15. The Permittee shall monitor all operations to ensure compliance with the requirements contained in Table 2.

#### Table 3 Kev:

CFR = Code of Federal Regulations	ULSD = ultra low sulfur distillate fuel oil
CFK – Code of rederal Regulations	OLSD — ultra low sulful distillate fuel oil
CO = carbon monoxide	USEPA= United States Environmental Protection Agency
EU = Emission Unit	

#### **Table 3 Notes:**

1. Chart means the Ringelmann Scale for grading the density of smoke, as published by the United States Bureau of Mines and as referred to in the Bureau of Mines Information Circular No. 8333, or any smoke inspection guide approved by MassDEP.

	Table 4				
EU	Recordkeeping Requirements				
32	1. As described in 40 CFR 60.48c(c), the Permittee shall maintain records for each opacity performance test as described in 40 CFR 60.48c(c)(1), (2) or (3) as applicable.				
	2. The Permittee shall keep records of the information contained in 40 CFR 60.48c(e)(1) through (11), as applicable.				
	3. As described in 40 CFR 60.48c(f)(1), the record of fuel supplier certification shall include the following:  a. The name of the oil supplier;				
	b. A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in 40 CFR 60.41c; and				
	c. The sulfur content or maximum sulfur content of the oil.				
	4. The Permittee shall record and maintain records of the type and amount of each fuel combusted during each calendar month as described in 40 CFR 60.48c(g)(2).				
	5. Pursuant to 310 CMR 7.04(4)(a), the results of the calendar year inspection, maintenance and testing and the date upon which it was performed shall be recorded and posted conspicuously on or near the permitted equipment.				
6. Pursuant to 310 CMR 7.04(2)(a), the smoke density recording charts shall be retained and made availab one year from the date of use.					
	7. The Permittee shall maintain adequate records on-site to demonstrate compliance status with all operational, production, and emission limits contained in Table 2 herein. Records shall also include the actual emissions of air contaminant(s) emitted for each calendar month and for each consecutive twelve-month period (current month plus prior eleven months). These records shall be compiled no later than the 15 <sup>th</sup> day following each month. An electronic version of a MassDEP approved record keeping form, in Microsoft Excel format, may be downloaded at <a href="https://www.mass.gov/guides/massdep-facility-wide-emission-restrictions-caps-reporting#WorkbookforReportingOn-SiteRecordKeeping">https://www.mass.gov/guides/massdep-facility-wide-emission-restrictions-caps-reporting#WorkbookforReportingOn-SiteRecordKeeping</a> .				
	8. The Permittee shall maintain records of monitoring and testing as required by Table 3.				

	Table 4				
EU	Recordkeeping Requirements				
32	9.	The Permittee shall maintain a copy of this Plan Approval, underlying Application and the most up-to-date SOMP, if required, for the EU(s) approved herein on-site.			
	10. The Permittee shall maintain a record of routine maintenance activities performed on the approved EU and monitoring equipment. The records shall include, at a minimum, the type or a description of the maintenance performed and the date and time the work was completed.				
	11.	11. The Permittee shall maintain a record of all malfunctions affecting air contaminant emission rates on the approved EU(s) and monitoring equipment. At a minimum, the records shall include: date and time the malfunction occurred description of the malfunction; corrective actions taken; the date and time corrective actions were initiated and completed; and the date and time emission rates and monitoring equipment returned to compliant operation.			
	12.	The Permittee shall maintain records to ensure sufficient information is available to comply with 310 CMR 7.12 Source Registration and 310 CMR 7.71 Greenhouse Gas Reporting, as applicable.			
	13.	The Permittee shall maintain records required by this Plan Approval on-site for a minimum of five (5) years.			
	14.	The Permittee shall make records required by this Plan Approval available to MassDEP and USEPA personnel upon request.			

# Table 4 Key:

CFR = Code of Federal Regulations	USEPA = United States Environmental Protection Agency
EU = Emission Unit	
SOMP = Standard Operating and Maintenance Procedure	

	Table 5			
EU	Reporting Requirements			
32	1. The Permittee shall notify the Western Regional Office of MassDEP, in writing, the actual date that construction of EU 32 commenced. This notice shall be postmarked no later than 30 days after such date. This notification shall include:			
	a. The design heat input capacity of EU 32 and identification of fuels to be combusted in EU 32.			
	b. The annual capacity factor at which the Permittee anticipates operating EU 32 based on all fuels fired and based on each individual fuel fired.			
	2. The Permittee shall notify the Western Regional Office of MassDEP, in writing, the actual date of initial startup of EU 32. This notice shall be provided to MassDEP and postmarked within 5 days of initial startup.			
	3. The Permittee shall submit to the Western Regional Office of MassDEP the performance test data from the initial and subsequent performance tests for determining the fuel oil sulfur content and opacity of stack emissions.			
	4. The Permittee shall submit semi-annual excess emission reports to the Western Regional Office of MassDEP for any excess opacity emissions from EU 32 that occur during the reporting period. The reporting period for the reports is each six-month period. All reports shall be submitted to the Western Regional Office of MassDEP and shall be postmarked by the 30 <sup>th</sup> day following the end of the reporting period.			
	5. The Permittee shall submit semi-annual reports to the Western Regional Office of MassDEP of the information contained in 40 CFR 60.48c(e)(1) through (11), as applicable. The reporting period for the reports is each six-month period. All reports shall be submitted to the Western Regional Office of MassDEP and shall be postmarked by the 30 <sup>th</sup> day following the end of the reporting period.			
	6. The Permittee shall submit to MassDEP all information required by this Plan Approval over the signature of a "Responsible Official" as defined in 310 CMR 7.00 and shall include the Certification statement as provided in 310 CMR 7.01(2)(c).			
	7. The Permittee shall notify the Western Regional Office of MassDEP, BAW Permit Chief by telephone: 857-260-1885 and email: marc.simpson@mass.gov, as soon as possible, but no later than three (3) business day after discovery of an exceedance(s) of Table 2 requirements. A written report shall be submitted via MassDEP's Compliance Reporting System ( <a href="https://eeaonline.eea.state.ma.us/EEA/ComplianceReport/">https://eeaonline.eea.state.ma.us/EEA/ComplianceReport/</a> ) under Exceedance Report (EXCDNC), within ten (10) business days thereafter and shall include: identification of exceedance(s), duration of exceedance(s), reason for the exceedance(s), corrective actions taken, and action plan to prevent future exceedance(s).			

	Table 5				
EU	Reporting Requirements				
32	8. The Permittee shall report annually to MassDEP, in accordance with 310 CMR 7.12, all information as required by the Source Registration/Emission Statement Form.				
	9. The Permittee shall report annually to MassDEP, in accordance with 310 CMR 7.71, all required greenhouse gas emissions, as applicable.				
10. The Permittee shall provide a copy to MassDEP of any record required to be maintained by this Plan within 30-days from MassDEP's request.					
	11. At least 30 days prior to emission testing, the Permittee shall submit to MassDEP for written approval a stack emission pretest protocol.				
	12. The Permittee shall provide the Western Regional office of MassDEP at least 30 days prior notice of any performance test to afford the MassDEP the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the owner or operator of an affected facility shall notify the MassDEP as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the MassDEP by mutual agreement.				
	13. Within 60 days after emission testing, the Permittee shall submit to MassDEP a final stack emission test results report and/or opacity performance test data.				

# Table 5 Key:

BAW = Bureau of Air and Waste
CFR = Code of Federal Regulations
EU = Emission Unit
USEPA = The United States Environmental Protection Agency

# 4. SPECIAL TERMS AND CONDITIONS

A. The Permittee is subject to, and shall comply with, the Special Terms and Conditions as contained in Table 6 below:

	Table 6				
EU	Special Terms and Conditions				
32	1. EU 32 shall consist of the equipment specified in Table 1 herein.				
	2. EU 32 shall be equipped with an oxygen trim system as defined in 40 CFR 63.11237.				
3. The fuel oil sulfur limits apply at all times, including periods of startup, shutdown and malfunction described in 60.42c(i).					
	4. The Permittee shall set the oxygen level, for the oxygen trim system, no lower than the oxygen concentration measured during the most recent inspection/test as performed pursuant to 310 CMR 7.04(4)(a).				
	5. EU 32 is subject to 40 CFR 60 Subpart Dc- Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60.40c through 60.48c.				
	Since MassDEP has not accepted delegation for Subpart Dc for sources which are not subject to 310 CMR Appendix C, the Permittee is advised to consult with USEPA Region 1 at 5 Post Office Square, Suite 100, Boston, MA 02109-3912, telephone: (617) 918-1111. Other applicable requirements may include notification, recordkeeping, and reporting requirements.				

# Table 6 Key:

CFR = Code of Federal Regulations
EU = Emission Unit
USEPA = The United States Environmental Protection Agency

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- B. The Permittee shall install and use an exhaust stack, as required in Table 7, on each of the Emission Units that is consistent with good air pollution control engineering practice and that discharges so as to not cause or contribute to a condition of air pollution. Each exhaust stack shall be configured to discharge the gases vertically and shall not be equipped with any part or device that restricts the vertical exhaust flow of the emitted gases, including, but not limited to, rain protection devices known as "shanty caps" and "egg beaters."
- C. The Permittee shall install and utilize exhaust stacks with the following parameters, as contained in Table 7, for the Emission Units that are regulated by this Plan Approval:

Table 7				
EU Stack Height Above Ground (feet) Stack Inside Exit Dimensions (inches)		Nominal Stack Gas Exit Velocity Range (feet per minute)	Nominal Stack Gas Exit Temperature Range (°F)	
32	79	36	340-3400	238-307

## Table 7 Key:

EU = Emission Unit		°F = Degree Fahrenheit

# 5. **GENERAL CONDITIONS**

The Permittee is subject to, and shall comply with, the following general conditions:

- A. Pursuant to 310 CMR 7.01, 7.02, 7.09 and 7.10, should any nuisance condition(s), including but not limited to smoke, dust, odor or noise, occur as the result of the operation of the Facility, then the Permittee shall immediately take appropriate steps including shutdown, if necessary, to abate said nuisance condition(s).
- B. If asbestos remediation/removal will occur as a result of the approved construction, reconstruction, or alteration of this Facility, the Permittee shall ensure that all removal/remediation of asbestos shall be done in accordance with 310 CMR 7.15 in its entirety and 310 CMR 4.00.
- C. If construction or demolition of an industrial, commercial or institutional building will occur as a result of the approved construction, reconstruction, or alteration of this Facility, the Permittee shall ensure that said construction or demolition shall be done in accordance with 310 CMR 7.09(2) and 310 CMR 4.00.
- D. Pursuant to 310 CMR 7.01(2)(b) and 7.02(7)(b), the Permittee shall allow MassDEP and / or USEPA personnel access to the Facility, buildings, and all pertinent records for the purpose of making inspections and surveys, collecting samples, obtaining data, and reviewing records.
- E. This Plan Approval does not negate the responsibility of the Permittee to comply with any other applicable Federal, State, or local laws or regulations now or in the future.
- F. The Application is incorporated into this Plan Approval by reference. Should there be any differences between the Application and this Plan Approval, the Plan Approval shall govern.
- G. Pursuant to 310 CMR 7.02(3)(k), MassDEP may revoke this Plan Approval if the construction work is not commenced within two years from the date of issuance of this Plan Approval, or if the construction work is suspended for one year or more.
- H. This Plan Approval may be suspended, modified, or revoked by MassDEP if MassDEP determines that any condition or part of this Plan Approval is being violated.
- I. This Plan Approval may be modified or amended when in the opinion of MassDEP such is necessary or appropriate to clarify the Plan Approval conditions or after consideration of a written request by the Permittee to amend the Plan Approval conditions.
- J. Pursuant to 310 CMR 7.01(3) and 7.02(3)(f), the Permittee shall comply with all conditions contained in this Plan Approval. Should there be any differences between provisions contained in the General Conditions and provisions contained elsewhere in the Plan Approval, the latter shall govern.

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# 6. MASSACHUSETTS ENVIRONMENTAL POLICY ACT

MassDEP has determined that the filing of an Environmental Notification Form (ENF) with the Secretary of Energy & Environmental Affairs, for air quality control purposes, was not required prior to this action by MassDEP. Notwithstanding this determination, the Massachusetts Environmental Policy Act (MEPA) and 301 CMR 11.00, Section 11.04, provide certain "Fail-Safe Provisions," which allow the Secretary to require the filing of an ENF and/or an Environmental Impact Report (EIR) at a later time.

# 7. APPEAL OF DECISION

This Decision is an action of MassDEP. If you are the applicant, an aggrieved person who has submitted written comments, where applicable, or a ten persons group that has submitted written comments, where applicable, you may request an adjudicatory hearing in accordance with 310 CMR 7.51(1). A request for a hearing must be made in writing and postmarked within twenty-one (21) days of the date of issuance of this Decision.

Under 310 CMR 1.01(6)(b), the request for adjudicatory hearing must state clearly and concisely the facts which are the grounds for the request, and the relief sought. Additionally, the request must state why the Decision is not consistent with applicable laws and regulations. In the request, an aggrieved person must state with specificity the basis of his or her claim of aggrievement. A ten persons group that files a request for an adjudicatory hearing must include affidavits from each person of the group stating their intent to be a part of the group and to be represented by the group's authorized representative. The request must comply with all other requirements of 310 CMR 1.01.

The issues raised in the request for adjudicatory hearing are limited to the subject matter of this Decision and are limited further to the issues raised during the public comment period. If the issue was not raised during the public comment period, the issue may be raised upon showing that it was not reasonably possible with due diligence to have raised such matter during the public comment period or for good cause shown.

The hearing request along with a valid check payable to Commonwealth of Massachusetts in the amount of one hundred dollars (\$100.00) and a completed Adjudicatory Hearing Fee Transmittal Form found at <a href="https://www.mass.gov/doc/adjudicatory-hearing-fee-transmittal-form/download">https://www.mass.gov/doc/adjudicatory-hearing-fee-transmittal-form/download</a> must be mailed to:

Commonwealth of Massachusetts
Department of Environmental Protection
P.O. Box 4062
Boston, MA 02211

An aggrieved person or a ten persons group shall send a copy of the request for an adjudicatory hearing by first class mail to the Applicant and MassDEP's contact person listed in the Decision.

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The request will be dismissed if the filing fee is not paid, unless the appellant is exempt or granted a waiver as described below.

The filing fee is not required if the appellant is a city or town (or municipal agency), county, district of the Commonwealth of Massachusetts, the Massachusetts Bay Transportation Authority, federally recognized Indian tribe housing authority, effective January 14, 1994, or a municipal housing authority. MassDEP may waive the adjudicatory hearing filing fee for a person who shows that paying the fee will create an undue financial hardship. A person seeking a waiver must file, together with the hearing request as provided above, a request for the waiver of the fee and an affidavit setting forth the facts believed to support the claim of undue financial hardship as specified in 310 CMR 4.06(2).

Should you have any questions concerning this Plan Approval, please contact Cortney Danneker by telephone at 857-301-0758, or in writing at the letterhead address.

Marc Simpson
Air Quality Chief
Bureau of Air & Waste

ecc: MassDEP/Boston - Yi Tian MassDEP/Boston - Michael Woodman